

We claim:

1. A system for disseminating information over a wide area network, comprising:
 - a) a central caching unit for storing data to be made available over said wide area network;
 - b) a plurality of local access nodes for permitting users to access said wide area network;
 - c) distributed caching units associated with said local access nodes for storing cacheable material;
 - d) a communications system for establishing communications between said central caching unit and said local caching units for the transfer of cacheable material from said central caching unit to said local units, and
 - d) routing means at said local access nodes for routing packets from users to a destination address, said routing means including local routing tables containing the addresses of material cached at the associated local node and responding to routing requests for cached material by first directing said requests to the local cache.
2. A system as claimed in claim 1, wherein said communications system is a multicast communications system.
3. A system as claimed in claim 2, wherein said multicast communications system is a satellite communications system.
4. A system as claimed in claim 2, wherein locally cached material has a distinctive identifier, and said local routing tables respond to a request for material with a said distinctive identifier by associating it with the network address of the locally cached material.
5. A system as claimed in claim 4, wherein said distinctive identifier is also associated with the address on said wide area network of said central caching unit, and in the event said material is not available in the local cache, said local cache is programmed to substitute the address on said wide area network of said central caching unit and set up a connection via said router with said central caching unit over the wide area network.
6. A system as claimed in claim 5, wherein said distributed caching units comprise servers and storage devices on a local subnet attached to said routing means.

7. A system as claimed in claim 2, wherein said local routing tables are static routing tables.

8. A system as claimed in claim 2 further comprising at least one content provider connected to said wide area network, a storage device at said content provider storing uncacheable material for access by a client over said wide area network.

9. A system as claimed in claim 8, further comprising means responsive to commands from said content provider to distinguish cacheable material from non-cacheable material.

10. A system as claimed in claim 9, further comprising means for uploading cacheable material over said wide area network from said content provider to said central caching unit where it can be made available to said clients either over said wide area network or from said distributed caching units associated with said local nodes.

11. A system as claimed in claim 10 further comprising filtering means at said distributed caching units to permit multicast material to be filtered in accordance with local requirements.

12. A system as claimed in claim 2, wherein said wide area network is the Internet.

13. A method of disseminating information over a wide area network, comprising the steps of:

- a) storing cacheable material to be made available over said wide area network at a central caching unit;
- b) disseminating said cacheable material over a communications system to distributed local caching units associated with local access nodes giving remote clients access to said wide area network; said cacheable material stored at said local caching units being given a distinctive identifier; and
- c) intercepting requests from clients at said local access nodes for material with a said distinctive identifier and first routing said requests to the local caching unit for retrieval of the material therefrom.

14. A method as claimed in claim 13, wherein said material is disseminated using multicast techniques.

15. A method as claimed in claim 14, wherein said requests are then routed from the local access node to said central caching unit or the corresponding content provider via said wide area network in the event that requested material is not available in the local caching unit.

16. A method as claimed in claim 14, wherein the addresses of said local caching units are stored in local routing tables in a router associated with a local access node.

17. A method as claimed in claim 16, wherein said local routing tables are static routing tables.

18. A method as claimed in claim 18, wherein said cacheable material is multicast via a satellite communications system establishing satellite communications between said central caching unit and said local caching units.

19. A method as claimed in claim 18, wherein cacheable material is uploaded to said central caching unit for multicasting to said distributed caching units via said wide area network.

20. A method as claimed in claim 19, wherein uncacheable material is stored at a content provider's site and made available to clients via the wide area network.

21. A method as claimed in claim 14, wherein material received at said distributed caching units is filtered in accordance with local requirements.

22. A method as claimed in claim 14, wherein said wide area network is the Internet and said distinctive identifier is a URL with a distinctive monicker embedded in the URL.

23. A method as claimed in claim 12, wherein said distinctive monicker is the domain name of said central caching unit.

24. A method as claimed in claim 20, wherein the content provider selects and identifies cacheable and uncacheable material.

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